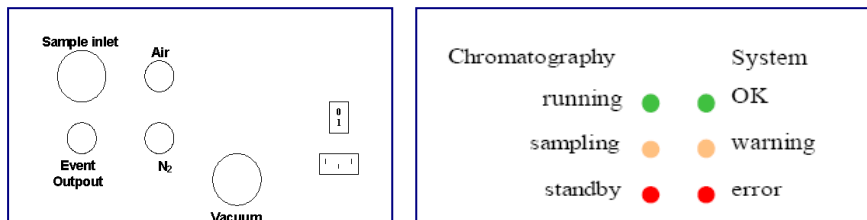


EASY START airTOXIC CALIB model A73022

Serial Number: #25860222 (February 2022)



ANALYSER INSTALLATION



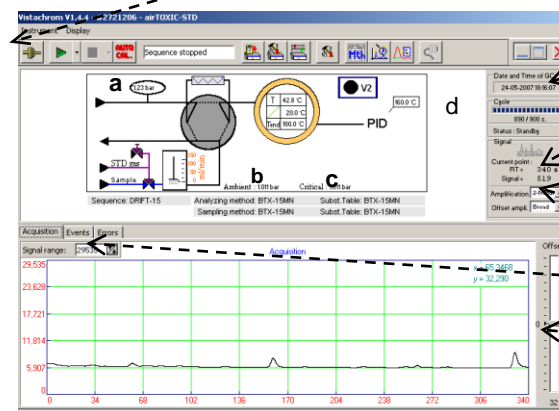
- 1) Install the permeation tube into the oven.
- 2) Connect **N₂** on "**N₂**" inlet with **3 Bars**.
- 3) Connect **Air** of **N₂** on "**Air**" inlet with **3 Bars**.
- 4) Connect the **vent** to an outdoor tube.
- 5) Connect **sampling pump** (800 to 900 hPa under 1atm) on "**vacuum**" connector and switch it on.
- 6) Connect **sample gas** on "**SAMPLE**" inlet (15ml/min < flow < 25ml/min).
- 7) **Plug in USB keyboard and mouse**.
- 8) Plug the **power supply cable** to a **UPS** and switch "**ON**" the instrument.
- 9) "**OK**" and "**stand by**" LEDs turn on. Then go to **ANALYSIS START**.
- 10) To set the **instrument clock** to the **local time**, please refer to the **GC clock adjustment** procedure in the user manual and on the desktop.

ANALYSIS START

- 7) Open **Vistachrom15**
- 8) Select user name "**super user**" enter the password "**1234**" with **USB keyboard** and click "**enter**".
- 9) **Double click** on the icon of your analyser (#25860222).

- 1) The synoptic of your analyser appears.

- 2) Click on "**Log ON**" to connect your analyser to Vistachrom1.49b.



GC clock

Signal value (base-line at about 3000)

Amplification degree

Range control

Signal offset control




- 3) Check information on synoptic and compare with control quality report data:
 - a. Head pressure column: **0.875 (±0.01) bar**
 - b. Ambient pressure: **1.024 bar**
 - c. Critical pressure: **1.008 bar** (In sampling, $P_{\text{ambient}} - P_{\text{critical}} = \Delta P > 10\text{hPa}$)
 - d. Temperature of PID (wait for the temperature to reach **150°C**)
- 4) **Double click** on "**GC clock**" to synchronize GC from PC clock.
- 5) You can choose and load your sequence of work pushing
- 6) Click on to start the analysis. The first acquisition will be at the second analysis cycle. Check if during the acquisition, base-line signal is at about 3000, control with signal offset control

EXPLOIT DATA


Data is automatically collected into:

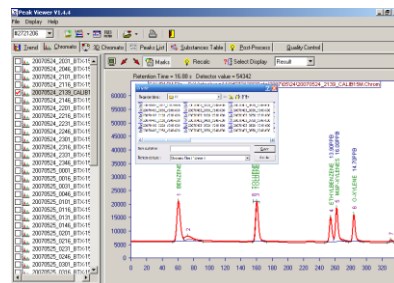
“D:\Vistachrom/#25860222/Data or Trend” folder ordered chronologically.

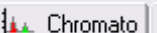
Different ways to consult and analyse your data:

- 1) In the synoptic, click  to see **last result table**
- 2) In the synoptic, click  to open **peak viewer** and click  to open chromatograms you need in:
D:\Vistachrom/#25860222/Data/YYYY/MM/DD
- 3) Data from each analysis is collected into a table in ASC format for post treatment: **D:\Vistachrom /#25860222/Trend**

Displays in peak viewer:


- 1)  allows the follow-up of a parameter (area, retention time, base sensitivity or concentration) for several days and for each substance.



- 2) : to see your chromatograms of each analysis.

CALIBRATION

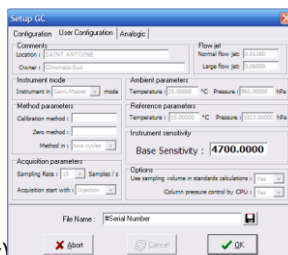
Manual calculation of base sensitivity (a.u./ng):

To see **Base Sensitivity** click on  in the synoptic **Vistachrom1.5**.


Example: benzene **40 ppb(v)** ($1 \text{ ppb(v)} = 3.25 \mu\text{g/m}^3$)

Base sensitivity = 4700 (1ng = 4700 area units)


If the analyser measures **36 ppb(v)** instead of 40 ppb(v) it means that **Base Sensitivity** has decreased it must be changed into: $4700 \times 36 / 40 = 4230$.

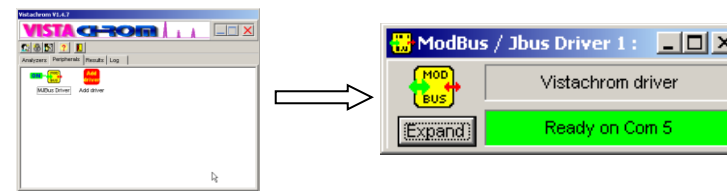



Autocalibration:

Click on  in the synoptic to activate auto calibration. It enables to correct base sensitivity of the instrument automatically every four calibration.




COMMUNICATION PROTOCOLE For data transfer (ppb(v) or $\mu\text{g/m}^3$)

MJ Bus driver (ModBus) starts automatically with Vistachrom1.5, if not, select **peripherals** in first Vistachrom1.49b window and double click on .



Transferred data is the same and ordered same as in the table of value visible when you click on  in Vistachrom1.49b synoptic.

STOP THE ANALYSER

- 1) In the synoptic, press  selecting **stop at the end** of cycle
- 2) At the end of cycle, the analyser must be in stand by (LEDs **stand by** and **OK** are **turned on**)
- 3) Unlog analyser by pressing  \Rightarrow 
- 4) Close “**Windows**”. Wait a few minutes for the oven column temperature to decrease. Then switch off the analyser using the switch at the back of the analyser.
- 5) Close gases **N₂** and / or **Zero air**
- 6) Switch off the sampling pump.
- 7) Remove the permeation tube from the oven (keep it in a fridge).